

The Macdonald FARM Journal



VOL. 21, NO. 9

SEPTEMBER, 1960



CHOOSING THE PRETTIEST

Editorial

Farmers Must Know Why

DURING the past two months thousands of farm boys have had to make one of the greatest decisions of their lifetime. Some of them probably had little difficulty in deciding what they wished to do. They were able to choose between leaving the farm or remaining in agriculture. If they chose to remain in agriculture, then they are faced with the second decision: to continue their formal education or to trust to experience and their home training.

Experience is a great teacher, but it is sometimes expensive and always very slow. Modern farming practices and changing techniques demand more than experience. The operator of an enterprise valued at \$25,000 or more cannot afford to lose \$1,000 or even \$500 to learn that such a practice does not work for him. He must be equipped to make an informed judgment on the probable outcome of the project before he undertakes it. To do so he must know more than what will probably result; he must know *why* such a result is expected.

Formal education, if pursued long enough, can provide as much information on the *why's* as is available to man. Although the Diploma Course offered at Macdonald College does not pretend to provide all the information avail-

able on the *why's* which one may meet in agriculture, it does offer what is considered to be necessary basic information for becoming a successful farmer today. Just as important, it provides a base from which any interested farmer can pursue a subject further on his own, if he so desires.

The Diploma Course also brings young farmers in contact with experimental work being carried out in agriculture. With this contact they are in a much better position to judge, as they must do now and as they will be forced to do even more in the future, the merits of recommendations by research stations and agricultural colleges. This contact with experimental work will also enable future farmers to apply recommendations for improved practices to their own farms. Application of new techniques and new practices to individual farms on a practical and economically sound basis is not always easy to do. Each farm is a different enterprise and a practice which is sound for one may not be feasible on another.

Graduates of the Diploma Course also know where to turn for more information should they be stymied by some problem on their own farm. They form valuable associations and friendships with other young farmers and teachers and

researchers — friendships which are both socially and economically valuable in later life.

Students enrolled in the Diploma Course learn what is the equivalent of personal experience — the experience of others. They read about methods and practices tried by other farmers and they discuss techniques about which they may have heard. Because information can be acquired this way much faster than by trial and error, their fund of knowledge can be many times that possible from the "trial and error" method.

During their stay at Macdonald College graduates of the Diploma Course learn to meet and to get along with others. They develop qualities of leadership and so are fitted for community responsibilities on their return to the farm.

The Diploma Course offered at Macdonald College is a practical course in agriculture designed particularly for those who are planning to continue farming. It provides an opportunity to study livestock and poultry farming, field crop and fruit and vegetable production, woodlot management and farm economics. Young farmers planning to make a career of farming are urged to consider the Diploma Course offered by Macdonald College.

APPROACHING EVENTS

- | | |
|---------------|--|
| Sept. 28 — 30 | Provincial and Canadian Ploughing Matches, at Macdonald College. |
| Oct. 1 — 6 | Sherbrooke Winter Fair. |
| Oct. 10 | Thanksgiving. |
| Oct. 9 — 15 | Fire Prevention Week. |
| Oct. 29 | Annual Meeting, Quebec Farm Radio Forum and Quebec Farmers' Association, at Ormstown High School, Ormstown, Que. |

COVER PICTURE

Cover picture shows Bob Reed, Huntingdon, judging the cut flower exhibits at the Huntingdon Fair. With him are Mrs. Robb and Mrs. Henderson.

— Journal photo

ADVERTISING HEADLINE
always the 25th of the month preceding!

INDEX

Vol. 21, No. 9

September, 1960

	PAGE
Editorial	2
Approaching Events	2
Observations	3
Good Management Means Soil Testing	4
Horses — They Have a Place	6
New Deputy Minister	6
Champion Cattle at Sherbrooke	8
4-H Judging Winners	9
Films	10
Moving Poultry Off Range	11
College Page	13
Beef Section	14
Would You Believe It	15
Country Lane	16
Soap or Synthetic Detergent	17
Better Impulse	18

*The Macdonald Farm Journal is a monthly publication of
Macdonald College, McGill University.*

*All communications should be sent to Macdonald Farm Journal,
Macdonald College, Quebec.
Authorized as second class mail,
Post Office Department, Ottawa.*

REVISED ADVERTISING RATES FOR THE MACDONALD FARM JOURNAL

Effective May 1, 1959

Published by Macdonald College, Que.
Issued monthly, 15th. Closing date
5th. One year for \$1.00 or 3 years
for \$2.00.

General Advertising Rates: (Ag.
Comm. — 15%; c.d. 2%)

Per agate line (14 lines to the inch)

Casual	26¢
1,000 lines (per year)	25¢
3,000 lines (per year)	24¢
5,000 lines (per year)	22.5¢
per column inch	\$3.64
per page	\$109.20
Color (extra per page)	\$35.00

Mechanical Requirements:

Type page: 6 $\frac{7}{8}$ ins. wide x 10 ins.
deep

Trim size: 8 $\frac{1}{4}$ ins. wide x 11 ins.
deep

Column width: 2 $\frac{1}{4}$ ins. (13 picas)

Number of columns — 3

Halftone screen: 110-120.

Editor and Advertising Manager:

L. G. Young, Macdonald College,
Que.



Observations

Whiskey Chocolate

The other day one of the persons whom we're pleased to count as a friend returned from a holiday in Ireland, and brought us a bar of milk chocolate by Willwood. The brand name is "Irish Coffee". If you've ever had Irish coffee, you'll be able to guess the content of this chocolate bar.

Among other unique qualities Irish coffee is liberally laced with Irish whiskey. "Irish Coffee" milk chocolate bars have the same unique quality. It seems to us that there would be a good sale of such chocolate bars in Canada particularly with the promotional support of some of our advertising agencies.

Just think... in those provinces where liquor laws are pretty tight it would be possible to obtain a supply of spirits any time at a drug or candy store. Instead of cocktail parties Ottawa could

throw chocolate dessert parties. There would be something patriotic, too, about eating such chocolate bars. Every chocolate bar eaten would help move the dairy industry surplus, provide additional work for our distillers, improve the health of our citizens and boost the economy of those countries which produce chocolate. It's quite unlikely that anyone could eat enough chocolate to impair driving ability. Yes sir! Seems to us those Irishmen have a mighty good product here.

A Costly Habit

DRIVING up through the Gati-neau Valley and back to Montreal through the Laurentians during the recent very hot dry spell, we couldn't help noticing the habits of motorists ahead. Nonchalantly, with an air of careless affluence, they were tossing their cigarette butts out the car win-

dow. In most cases the butts had not even been extinguished.

The fact that this was happening in a region which was tinder dry shows that these smokers are certainly unthinking. The fact that it happens at all is evidence of a very dirty habit and a lack of pride. All modern cars are equipped with ashtrays and most have two. There is no reason for persons to pitch cigarette butts out of car windows. Through habit cigarette packages go the same way and these people complain bitterly when taxes rise... but what can they expect? Somebody has to pay to clean up the mess. And throwing live butts out in a region as dry as this was before recent rains seems to us to be striking at the very source of our affluence, national and personal.

Farming Requires Money

Listening to the CBC programme "Summer Fallow" we heard the following story about a tobacco farmer which we think can be applied to other types of farming as well.

Although the tobacco farmer had

(Continued on page 9)

Good Management Means Soil Testing

by John ELLIOTT, College Fieldman

SOIL is defined by the dictionary as "the upper stratum of the earth". The farmer defines it as his bread and butter. Soil is important to everyone. It is unfortunate that soil has not received as much attention as livestock, for it is the soil on which animal and human beings live. The soil being the primary factor of all growth, let's take a look at some of the things that can improve its condition.

Soil Testing

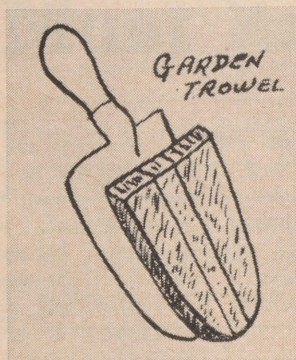
A soil test gives information on amounts of nitrogen, phosphorous and potash in the soil, with recommendations. Soil testing also gives the acidity and amount of lime required, if lime is necessary. This service by the Provincial Government is free of charge.

The taking of a soil sample is not complicated but the manner in which it is done is important. With a trowel, shovel, or soil probe, dig thin slices or borings throughout the whole field. The size of field will determine the number — from 10 to 20. They should be plough depth, about 6". Avoid any areas with animal droppings or washed out areas. These slices or borings should be placed in a clean pail and thoroughly mixed. One pint of this mixed, air-dry soil is sufficient. If the field is large and portions of it have had different management, it is best to have a sample for each. In this way recommendations for each part of the field will be more accurate.

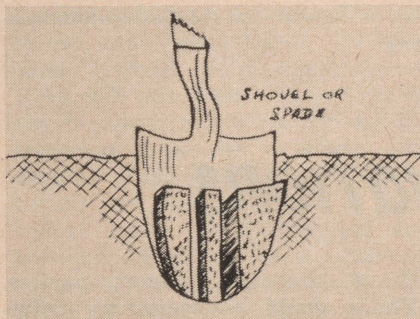
Management means the field history, such as area covered by sample, the last crop, yield, whether manure, fertilizer or lime have ever been applied. Information as to intended purpose of field will include details as to the next crop to be sown, whether manure will be applied and, if so, how much. All this information will be of use in determining the needs of the field.

If several samples are to be tested, it is important that a farmer make his own records as to where the samples were taken. Memory often fails and the results would be useless in the event of his not remembering what sam-

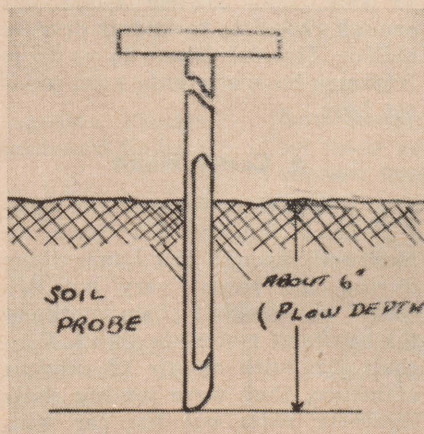
For taking soil samples
use a



or



or



ples came from where. Soil samples should be sent to Soil Testing Laboratory, Ste. Anne de la Pocatière, Que.

Lime

The results of a soil test will indicate the acidity of the soil. The term used is pH. What the term pH means exactly is unimportant here but the pH number is important. A pH of seven (7) is regarded as neutral. If the number is far below neutrality (below 5.5), the soil is strongly acid and should be brought up close to seven or in the 6-7 range. One thing to be remembered is that it requires more time to elevate a pH from 5 to 6 than it would from 6 to 7. Generally legumes require a pH of 6-7 because the micro-organisms in the soil necessary for good legume production require this pH range for their activity. Oats on the other hand will be better at a higher pH but can go down to 5 though certainly not with as good results.

The best time to lime is in the fall, after ploughing. It can be done before but in that case the lime would end up at the bottom of the furrow. Although it would not be wasted, the lime would not then give as good a result as if worked into the topsoil in the spring at seeding time. Autumn is usually the recommended time for liming. In the springtime deliveries may be late and time is important for the farmer. In the fall farmers usually have more time. All the crops will have been harvested and it is usually easier for the heavy trucks on the fields particularly if the ground is frozen.

The question may arise: What makes a soil acid? The most obvious answer is leaching by water. Substances which dissolve easily in water (lime) are washed away

THE DIPLOMA COURSE IN AGRICULTURE

The course of study includes Instruction in

LIVESTOCK FARMING

GROWING OF FIELD CROPS

POULTRY PRODUCTION AND MANAGEMENT

FRUITS AND VEGETABLES

FARM ECONOMICS, ETC.

This is a practical course in agriculture designed to meet the needs of those who have chosen farming as a career.

Entrance requirements — Completion of Third Year High is required. Applicants must have passed their 17th birthday and have a practical knowledge of farm operations.

Financial Assistance — Loans, bursaries and grants are available to those requiring financial assistance.

For additional information apply to the

REGISTRAR, MACDONALD COLLEGE, QUEBEC

REGISTRATION ON OCTOBER 17th.

with spring runoff, particularly in fields which do not drain well. If the soil is of a nature which does not have a natural supply of limestone to replace this acid neutralizing substance the result is a gradually increasing acidity. In Quebec very few places have a natural supply; therefore soil tests should be taken at least once every crop rotation.

Fertilizers

If the soil test shows a deficiency or lack of the major elements, recommendations will be given. These recommendations are provided on the basis of the field history and future use of the land. The major elements of a fertilizer are nitrogen, phosphorous and potassium (potash) or possibly better known as N.P.K. Each element plays a specific role depending on the crop, for example oats, corn or legumes, etc.

Nitrogen — This is needed for rapid growth and gives the dark green colour to plants. It also increases yield and protein content.

Phosphorus — Necessary for root formation and a rapid and vigorous start to plants. It later stimulates blooming and hastens maturity.

Potassium — Gives a vigour and disease-resistance to plants, in addition to strengthening stalks. It improves the quality of plants and gives the plumpness to grain and seed.

The elements are applied in different ratios and concentrations. As an example, a ratio of 1-2-2 can be applied in a concentration of 5-10-10 or even higher by doubling this to make it a 10-20-20 which is still the same ratio throughout. The need for different ratios and concentrations depends on the availability of the elements in the soil and the type of crop. Corn, for instance, requires a lot of nitrogen. On the other hand too much nitrogen in an oat crop will cause lodging. A legume crop draws the nitrogen from the air and so only phosphorus and potassium are needed.

Fertilizers pay for themselves. An application of fertilizer is not used up in one year. A certain amount will be left. In the case of grain a better quality and higher yield is produced in addition to more and better straw.

The County agronomist is the man best informed on conditions for the county. It is always wise to consult him when making deci-

sions on soil testing and fertilizers.

• • •

Recommended Reading: Fertilizers For Various Crops, Pub. 870, Canada Department of Agriculture, Ottawa.

Lime And Other Soil Amendments, Pub. 869, Canada Department of Agriculture, Ottawa.

QUALITY PREMIUMS FOR HOGS TO BE CHANGED

The Federal Government has announced that it will pay a premium of \$3 per hog, starting October 3rd, for Grade A quality hogs marketed in Canada. The present premium is \$2 for Grade A and \$1 for Grade B.

In making the announcement Mr. Harkness said improved quality is needed if the Canadian hog industry is to maintain its proper position in domestic and export markets. Some improvements in the percentage of Grade A hogs has been noted since the Government changed the national grade standards for hogs in October of last year.

THE DEPARTMENT OF AGRICULTURE

gives a

Report to the Province



Horses — They Have A Place



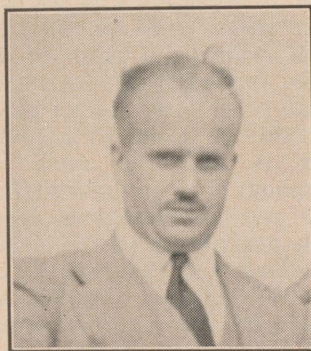
More horses were exhibited at fairs this year than in many a year. Why? "There's money in them", say the horsemen.

DR. ERNEST MERCIER APPOINTED NEW DEPUTY MINISTER

The appointment of Dr. Ernest Mercier as Deputy Minister of Agriculture has recently been announced by the Quebec Government. He succeeds Mr. René Trépanier who has retired after 23 years of service.

Dr. Mercier was born at Rosaire, Montmagny County, in 1914. He was one of a farming family of 13 children. He studied at Laval University where he obtained his B.A. degree in 1939. In 1943 he graduated with a B.S.A. degree, also from Laval. In 1946 he obtained his Ph. D. from Cornell University.

While working with the Quebec Department of Agriculture from 1947 to 1950 he organized the artificial insemination unit at St. Hyacinthe. In 1950 he moved to the Experimental Station at Lennoxville where he was in charge of the Animal Husbandry Division until 1952 when he was appointed Superintendent. In July of 1960 Dr. Mercier was appointed Chairman of the Department of Animal



Science at Macdonald College, from which post he is resigning to assume his new duties as Deputy Minister of Agriculture.

He is a Past President of La Corporation des Agronomes de la Province de Quebec and a member of several societies and other agricultural organizations. He was the first Director of the School of Applied Sciences of the University of Sherbrooke. He is also a member of the Canadian French Language Farm Writers Association.

HORSES, in the last decade, have become increasingly confined to livery stables and race tracks. On many of our commercial farms they have disappeared completely. It has been a long while since machinery manufacturers turned out a line of horse-drawn farm equipment. Modern farming methods and practices have practically ruled out the draft horse. Yet this year horses of all types seem to be enjoying a popularity at county fairs which has not been present for many a year. Why?

Wilson Brothers of North Sutton and Gerald Duffin of Sutton Junction, both exhibiting heavy horses at Brome Fair, reply bluntly: "There's money in them". Draft horses are scarce, they say. Demand has outdistanced supply and prices are rising. Farmers with breeding stock are starting to cash in on the boom.

J. A. Guimont of the Quebec Department of Agriculture warned this past spring that with present prices farmers with breeding stock should consider horse breeding as a source of profit. In the mixed farm enterprise a person with a knack for horses can pick up some extra dollars by raising one or two foals a year.

Why has the price for horses started to climb? It is difficult to

put a finger on any single complete answer, but there are several possible reasons. When gas mechanization hit eastern agriculture, many farmers sold off all their horses in favour of a tractor which required, so they thought, less care and which gave them extra feed for a few more head of cash producing livestock. Some of these farmers acted too hastily.

There are farms where draft horses remain less expensive to operate than tractors according to Mr. Guimont. Some farms are not particularly well suited to the operation of tractors, either because the land is rough or because of wet areas.

Wherever it can be fitted into the farm operation a combination of horses and tractor offers a number of advantages. Some tillage or harvesting operations can be carried out much more quickly using tractors than with horses. In fairness to horses, however, there are times when heavy seasonal rains do not permit the use of tractors. Then horses come into their own because without them the job would simply not get done.

Some lumbering operations still depend on horses to supply motive power for moving pulp and logs. These and other such operations must go to the market to meet their needs for horses. Add to this the replacement demand from those farmers who have retained a team of horses for their operation, and you have a good brisk buying market.

We should maintain the horse population at its present level, according to Mr. Guimont. To do so, he thinks we will need to increase our annual yield of foals. Draft horses still have a place in many farm operations as a source of "horse-power" and of badly needed revenue. Breeders should capitalize on this returning market.

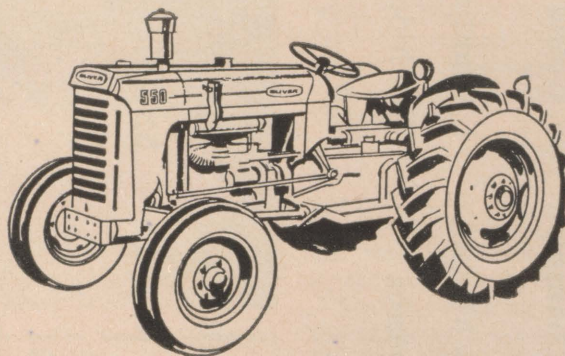
POTATOES FOR COWS

PULPED potatoes are a satisfactory replacement of grass silage in the diet of the milking cow. This is the conclusion reached by federal experts after tests with two breeds of cows over a three-year period.

R. J. Curtis of the Canada Department of Agriculture Research Station at Fredericton, New Brunswick, says that feeding potatoes to dairy cows would appear to be an economical means

(Continued on page 9)

WITH THE NEW OLIVER 550



**22% more traction
with
9% less fuel**

- In official performance contest**
- **43.2% horse power, during tests**
 - **5149 pounds of traction at the drawbar**
 - **12.54 horse power hours at the drawbar per gallon of gasoline**

This Tractor surpasses all other gasoline tractors in its category for two reasons: it is 9% more economical than the average of its class and 22% more powerful at the drawbar. Of all agricultural tractors this has the largest selection of attachments available.

**GO BETTER
GO TO THE FRONT
With OLIVER teamed-power
equipment sold at your local
Co-operative.**



CO-OPÉRATIVE FÉDÉRÉE DE QUÉBEC

POSTAL BOX 500 — YOUVILLE STATION — MONTREAL 11

Tel. DU. 9-8061

Champion Cattle At Sherbrooke

AYRSHIRE

	Sr. Champion	Sr. Res. Champion	Jr. Champion	Jr. Res. Champion	Grand Champion	Res. Grand Champion
--	--------------	-------------------	--------------	-------------------	----------------	---------------------

Male	Stanley Mount	John Johnston	Tom Ride & Son	J. Johnston	Stanley Mount	J. Johnston
Female	A. Johnston	Tom Ride & Son	J. Johnston	D. Johnston	A. Johnston	Tom Ride & Son

JERSEY

Male	Mrs. A. R. Virgin	Wilfrid Hadlock	Mrs. A. R. Virgin	Mrs. A. R. Virgin	Mrs. A. R. Virgin	Wilfrid Hadlock
Female	Mrs. A. R. Virgin	Mrs. A. R. Virgin	L. S. Webster	Pierre Veillon	Mrs. A. R. Virgin	Mrs. A. R. Virgin

CANADIAN

Male	O. A. Fowler	Emile Begin	Emile Begin	J. P. Verpaelt	Otis Fowler	Emile Begin
Female	J. P. Verpaelt	O. A. Fowler	O. A. Fowler	J. P. Verpaelt	J. P. Verpaelt	O. A. Fowler

HOLSTEIN

Male	Wilfrid Verville	George Gladu	Albert Pepin	George Gladu	Albert Pepin	Wilfrid Verville
Female	A. Pepin	George Gladu	A. Pepin	A. Pepin	A. Pepin	George Gladu

GUERNSEY

Male	Bromeside Farms	Bromeside Farms	Mrs. Twaallheven	Bromeside Farms	Bromeside Farms	Bromeside Farms
Female	Bromeside Farms	Floyd Sanborn	Bromeside Farms	Bromeside Farms	Bromeside Farms	Floyd Sanborn

POTATOES FOR COWS . . .

(Continued from page 7)

of disposing of potatoes surplus to market requirements and unsuitable for table or seed purposes.

The pulped potato experiments were made with 20 Holstein cows at the Fredericton station and 20 Ayrshires at the Charlottetown, P.E.I. experimental farm of the Canada Department of Agriculture. Four rations containing hay and concentrate, and equalized in dry-matter content, were used and each cow was fed each ration for a four-week period. To one ration grass silage was added; to another grass silage and potatoes in equal amounts, on a dry-matter basis, were added; to the remaining two rations potatoes only were added but the protein content of the concentrate was increased from the usual 16 per cent to 20 per cent.

This last diet increased the production of milk and of solids-not-fat in the milk but not butterfat.

When the silage was of good quality the average milk production was the same for all rations. With silage of only fair quality it was found advantageous to replace at least half of it by potatoes to improve milk production.

Indications were that cows would not maintain their weight as well on grass silage as when all or part of the succulent feed consisted of potatoes.

PIGEONS CAUSE VIRUS PNEUMONIA IN CATTLE

Pigeons!

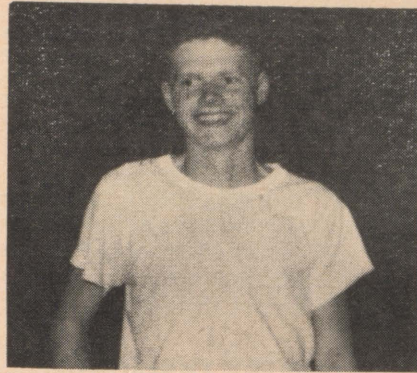
Keep them out of your barn — especially if they are the wild kind that drop in uninvited! There's a good chance that 1 out of 3 of them carry the Psittacosis virus, a disease that can cause pneumonia in cattle.

"Young calves are usually the victim," says Dr. Howard Neely of the Ontario Veterinary College. "They become infected by inhaling the dust from dried pigeon droppings, or by eating the hay or meal with the droppings."

Surveys of pigeon flocks in Southern Ontario by the Ontario Veterinary College revealed that 35% of healthy pigeons carried the virus, reports Dr. Neely. Apparently the pigeon itself is resistant to the disease.

"In experiments, passage of infectious material from one calf to another increased the virulence of the virus," he adds. "It resulted in a shipping fever type of illness

4-H Judging Winners



Wesley Mason smiles broadly following his win.

Wesley Mason, son of Mr. and Mrs. Murray Mason of Cowansville, won three trophies in the 4-H Calf Club Judging Competition held at the Sherbrooke Exhibition. In the dairy cattle division Wesley Mason won the Henry Thornton Cup for the highest number of points, the Boily Cup for the highest percentage and the Holstein Trophy for the highest number

of points in that breed of cattle.

First place in the sheep section went to Mahlon Grapes, of Compton, and second place to Gervais Bisson, of Richmond, with 530 and 483 points respectively of a possible 700.

The Nichol & Sons Trophy for the highest number of points in the swine division was won by Charles E. Couture, of Amqui. He also won a purse for an agricultural course.

The first eleven 4-H judges in the cattle division will be going to the Royal Winter Fair in Toronto. They include the top judge Wesley Mason, Cowansville; Dennis Bousquet, Granby; Bernard St. Martin, St. Nazaire d'Acton; Joseph Gendron, Montmagny; Berthe Larose, Barraute; and Francois Villeneuve, Rigaud; who ranked in that order. Also included among the top eleven were Jean Paul Labbé; of Barnston; Richard Johnston, of Hatley; and Robert Johnston, of Stanstead.

with death in 24 to 48 hours."

A survey showed that at least 45 per cent of cases of virus pneumonia in cattle are associated with the viruses of Psittacosis. Don't confuse it with a milder type of pneumonia characterized by runny nose and eyes, cough and diarrhea.

"Even humans can contract the disease," reports Dr. Neely. "One farmer used to collect wild pigeon feathers from his barn to prevent cattle from eating them. He used to put them in the same pocket as his handkerchief and then later disposed of them. He got pneumonia, supposedly from breathing in the infected dust from his handkerchief."

OBSERVATIONS . . .

(Continued from page 3)

not been told by his doctor that he was dying, he seemed to sense it, and turning to his wife who had been told he said:

"Martha, I want the bank manager to be one of my pallbearers."

Martha: "But you have closer friends than the bank manager. Why him?"

"Well, he's carried me this far and I think he deserves to carry me to the end!"

COUNTRYTIME

A series of CBC programs with reports of significant developments on the farm front.

Produced by Farm Broadcast Department of the CBC.

Program starts 7:45 P.M., local time, Wednesday, September 21st.

Preserve History

We note in an Editorial in the Equity that an historical society for Pontiac County has been proposed. Such a society should definitely be encouraged before the origins of the early settlers become completely lost. It has been suggested that those interested should write to the "Historical Society" in care of The Equity. We hope that a great many people will do just that.

Films For Your Programme

GRASSLAND FARMING

Produced by the National Film Board of Canada for the Canada Department of Agriculture.

16mm Color Sound
Running Time: 11 minutes
Up-to-date Methods of Grass Forage Cropping increase the farmer's yield.

This film for farmers demonstrates why grass is the most economical livestock feed to grow, and the importance of grass in soil conservation.

It shows how to grow a good crop of grass, using a companion crop such as oats as a starter. The right type of fertilizer for various types of soil, when and how to cut and labor-saving methods for storing are also demonstrated.

On permanent pasture, the film introduces a method of preventing uneven grazing or over-grazing — strip grazing in which a farmer uses a movable electric fence to allocate a fresh area for each day.

All these films are in the Provincial Film Library, in the Extension Department at Macdonald College. They may be borrowed for the nominal rental of 50c for a black and white film — \$1.00 for a coloured film — plus shipping charges.

Whether dairy or beef, cattle require large quantities of feed. This film will help the farmer assess his own practices and will suggest ways in which he can increase his gains.

COUNTRY THRESHING

Produced by the National Film Board of Canada

16mm Black & White
Running Time: 30 minutes
Candid Eye cameras visit the McNaughton farm in the Eastern Townships of Quebec to record sights and sounds that, not long ago, were common to most rural parts of Canada. The intense activity as a threshing crew moves in, the horse-drawn relays bringing in the sheaves, the chugging grain-eating threshing machine, and the

gargantuan mid-day meal prepared in grand style by the farm housewife — how long will these survive the trend to mechanization?

COUNTRY THRESHING preserves on film this fast-receding facet of Canadian country life. Background music is provided by the George Little Singers.

THE BRIGHT LAND

Produced by the National Film Board of Canada.

16mm Color Sound
Running Time: 30 minutes

There's something new under the sun...

and when it's in the tropical islands of the blue Caribbean it's as stirring as a calypso rhythm or the beat of a bongo drum.

This color film pays tribute to the newest nation in the Commonwealth — the recently formed West Indies Federation.

Ten palm-shaded, sea-swept islands — popularly regarded as a tourist paradise — face their new future with optimism.

If you went on a Caribbean cruise and visited Jamaica, Trinidad, Barbados, Grenada or any of the other islands of the union, you would come away with only a few of the many impressions this film leaves with you.

THE BRIGHT LAND takes you to many parts of the islands and lets you observe for yourself the new dynamism that is surging through every phase of national life.

IMPROVING ON EMPIRE TREFOIL

THE Empire variety of bird-foot trefoil is recommended widely in Eastern Canada and the North Eastern United States because it has demonstrated superior winter-hardiness to other named varieties and to seed imported from France, Italy, Denmark, Hungary and Czechoslovakia. Empire was bred at Cornell University, Ithaca, N.Y., from seed collected in 1934 on a farm in the Hudson River Valley near Albany. The farmer claimed it first appeared there about 1910 but he had no idea where it came from.

Empire is quite distinct from

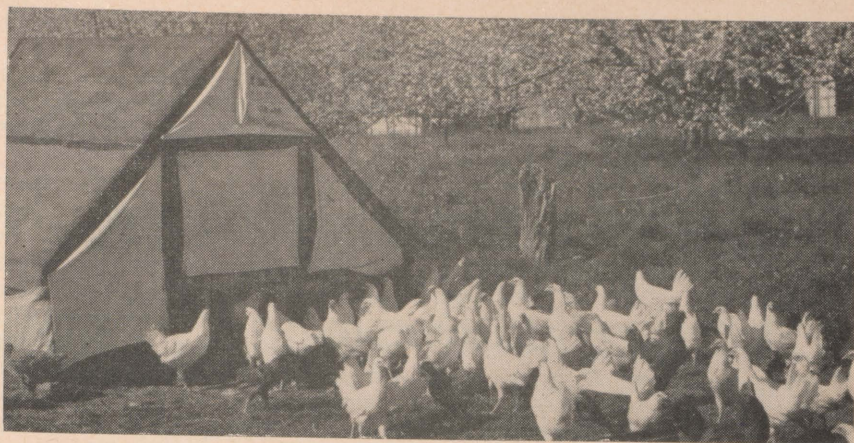
(Continued on page 12)



Shown above members of the Quebec Seed Board checking 1956 seeding of Alfalfa at Macdonald College during their recent visit to seed plots to check new varieties. From left to right: J. E. Chevrette, Ste. Anne de la Pocatière; A. Auger, Quebec Department of Agriculture; J. M. Girard, Normandin Experimental Station; P. Méthot, Quebec Department of Agriculture; J. Bubar, Macdonald College; L. Lachance, Lennoxville; Philippe Granger, St. Hyacinthe; P. Gervais (partly concealed), Lennoxville; A. Charbonneau, Joliette Agronome; L. Larose, Normandin.

Moving Poultry Off Range

Here are some tips . . .



POULTRY PARASITES

PARASITES are creatures which live at the expense of others. In the case of birds, the external parasites are represented by lice, mites and fleas, and internal parasites by intestinal worms, the tracheal worm (gape-worm) and the eye worm. Protozoan parasites of birds include the coccidia and another important group, the flagellates.

Generally speaking, broiler chickens are free from external parasites, thanks to the methods now used in rearing them and to disinfection and the provision of separate quarters for the young birds. Broilers are more likely to be affected by coccidiosis and enterohepatitis (blackhead) both of which are caused by protozoa. The administration of preventive medication incorporated in the birds' feed has proved effective for the control of coccidiosis, but blackhead must be prevented through the avoidance of damp litter and contamination from outside sources.

On ordinary, unspecialized farms, where less care is taken to segregate poultry and they are kept on pasture during their growing period, the birds are exposed to greater risks of contamination because of their contact with the soil, access to insect carriers of infection (intermediate hosts), and the dampness caused by changing weather conditions. Flocks raised under such outdoor circumstances are in greater danger of becoming infested by parasites than birds which are reared indoors.

Lice live on the birds continuously and can easily be seen. Mites, on the other hand, live in cracks in walls, in the nests and on the roosts and are very small and attack the birds at night. Some external parasites live on the blood of the birds

and thus cause progressive emaciation, decreased egg production and sometimes death. While clean living quarters must obviously be insisted on if the birds are to be kept free of either of the above-mentioned external parasites, successful control of mites necessarily involves killing them on the walls, roosts and nests: lice, however, are more easily destroyed on the birds where they live all the time.

Intestinal worms constitute another important group of poultry parasites. Poultrymen often ask whether worms are harmful to their flocks. Dr. Roland Filion, Director of the Veterinary Research Laboratory at Saint. Hyacinthe, admits that the question is debatable but points out that there are many examples to show that insects, worms and the eggs of worms act as reservoirs for certain diseases. This being the case, the point at issue is not merely one of infestation by worms but the possibility that diseases may be introduced by them into the flock, spread within it, or otherwise aggravated. Some very good vermifuges are available for the control of these parasites and the careful poultryman can practice preventive hygiene so as to avoid such problems.

CONTROL EXTERNAL PARASITES

AT this season of the year, external parasites of poultry may seriously harm the flock unless effective measures are taken to prevent their rapid multiplication. Several species of lice and mites can bother the birds by infesting the plumage or sucking the blood. A close examination of the roosts and of the rear end of the birds will reveal the presence of the pests. Mr. Joseph Filiatreault, of the Quebec Department of Agriculture, gives a brief description

of the principal methods commonly used to control these parasites.

Lice can be effectively controlled by the application to the perches, about an hour before the birds go to roost for the night, of nicotine sulphate (Black Leaf 40%) or of a 3% malathion solution or of a 1% lindane solution. On the night of the application, the poultry house should be well ventilated so that the birds themselves will not be seriously affected by the fumes.

Mites can be controlled as follows. Prior to treatment, the poultry house must be thoroughly cleaned and disinfected. The fresh litter is then sprayed with a solution of 2.5% DDT or a 1% solution of malathion, or sprinkled with 4% malathion powder at the rate of one pound per 40 square feet of floor space. It is recommended that roosts be treated with 40% nicotine sulphate at the rate of 16 ounces per 200 running feet and then, a few days later, with used crank case-oil. In the case of laying birds, the nests should also be treated with malathion powder.

Whatever pesticide is used, the manufacturer's directions should be followed to the letter and the treatments repeated at the prescribed intervals.

SPECIAL CARE NEEDED WHEN MOVING PULLETS OFF RANGE

THERE's a good chance you can hold pullet production when you move them off range and into the hen house, if you make the change smoothly.

O.A.C. Poultry specialist, Earl Hunt, says lack of exercise, lack of green forage and the sudden change from a low-protein growing mash to a high-protein laying mash is just too drastic a change for a short period. He says a severe physical reaction might set in.

(Continued on page 12)

SPECIAL CARE . . .

(Continued from page 11)

The problem isn't so bad with 4½ to 5½ month old birds that are well-fleshed and matured but not laying heavily. It is worse with pullets that are laying 15-20%.

"If the birds are still receiving a growing ration at the time they are moved off range, let them stay with this feed for at least 2 to 3 weeks after moving, says Hunt. Provide green feed. If you haven't green feed, a mild molasses flush may help. Don't feed new wheat until November and even then start them off with only 10%, he cautions. "New grain" poisoning is a real threat.

Little things help. Feed troughs and waterers similar to those on range should be placed in the pen until the birds get used to the regular laying equipment. Extra waterers also help in preventing blue comb.

"Catch some pullets and put them on roosts, the first few nights," he advises. "Otherwise they might stay on the floor and never roost. It's best to place all the birds on the roosts instead of the floor when you first bring them in."

If you throw the birds on the floor, most of them will sit in the corners instead of the roosts, he believes. Damp litter often results. Also, birds sitting in groups on the floor will become overheated and could contract respiratory disease.

A little extra care now will pay dividends later.

BIRDSFOOT . . .

(Continued from page 10)

birdsfoot trefoil introduced from Western Europe and from other varieties bred in North America. Outside of its very desirable winterhardiness, it is inferior to many other varieties in ease of establishment, spring vigour and, when winterkilling is not serious, yielding ability. A program was set up at Macdonald College to obtain and identify birdsfoot trefoil that is as hardy as Empire and without its weaknesses.

In this study, Professor John Bubar has obtained birdsfoot trefoil that is quite similar to Empire in many of its characteristics. This all came from the region in Russia near the east end of the Baltic Sea. Our conclusion is that the original stock for Empire must

also have been carried from the Leningrad region to the farm near Albany. It is quite possible that it was accidentally introduced in manure on cattle boats or in ships' ballast.

We are now testing the materials similar to Empire from North-western Russia and are finding other seed stocks which appear just as hardy as Empire, or maybe even hardier, and with better seedling establishment, spring vigour and other desirable characteristics. Now we think we have the best possible materials, we are starting on the long and involved task of tailoring new varieties to suit the requirements and conditions of Eastern Canada.

MARITIMERS BUILD OWN ABATTOIR

During the month of August maritime farmers commenced slaughtering their own livestock in their own abattoir. For years farmers in Nova Scotia have complained bitterly about low prices for farm animals in a region which does not produce enough meat and pork for its own needs. About two years ago, after studying the suc-

cess of the farmer-owned co-operative abattoirs in Quebec, they decided to build their own abattoir on the shores of Bedford Basin.

The abattoir slaughtered its first hogs in August. It is managed by Mr. E. C. Rettig. Products will carry the brand ENN-ESS. The co-operative, if successful, will have to obtain the support of the majority of farmers in Nova Scotia. For the past year both the Department of Agriculture and farm organizations have been urging farmers to grow more market livestock. Hog producers have responded admirably and it appears the abattoir is assured of sufficient supplies. The abattoir is a remarkable achievement, both for farmers and the co-operative movement. Outside of Quebec there are very few co-operatively owned abattoirs in Canada.

The lunch carried by school children should constitute one third of the day's nourishment as a balanced meal rather than a snack. Hot soup in a vacuum bottle makes a welcome cold weather addition to whole grain bread sandwiches, fruit and a raw vegetable "nibble", with milk to drink.



Directly after fruiting, old raspberry canes should be removed from raspberry patch and destroyed. New ones should be thinned lightly to remove all weak and diseased canes. In the spring canes should be thinned to stand 6 to 8 inches apart, leaving not more than 9 to 12 canes per yard of row. Professor Murray of the Department of Horticulture advises that canes should be trellised or tied in bunches so that they will be able to withstand the weight of snow in the wintertime. If canes are not supported, they will be bent and broken and fruit picking will be most difficult. If trellised, the support should be placed about two-thirds the height of the cane so that the cane can lean freely upon it.

The College Page

DR. W. E. SACKSTON JOINS MACDONALD STAFF

The appointment of Dr. W. E. Sackston as Professor of Plant Pathology has been announced by Macdonald College. Dr. Sackston comes to Macdonald from the Plant Pathology Laboratory of the Canada Department of Agriculture at Winnipeg, of which he has been head since 1958. He obtained his elementary education at Winnipeg and graduated from the University of Manitoba with a B.S.A. in 1938. In 1940 he obtained his M. Sc. from McGill University. In 1949 he graduated from the University of Minnesota with a Ph. D.

Dr. Sackston has spent some time in Chile and in Uruguay, on loan from the Canada Department of Agriculture. He speaks Spanish and Russian. Clan members may remember that he was a lab instructor at Macdonald College from 1938 to 1940.

He is married to the former Lois Steele of Ottawa, who graduated from Macdonald in 1940 with a B. Sc. (Agr.). They have two sons, Kenneth and James, and will reside on the Campus.



PROFESSOR COLE RETURNS TO MACDONALD

Professor Desmond Cole returns to Macdonald College as Assistant Professor of English. Professor Cole had previously taught English at Macdonald for four years and had been Warden of Brittain Hall for three years. He returns from the University of Toronto where he has been pursuing post-graduate studies.

1960 MACDONALD COLLEGE REUNION

DATE —

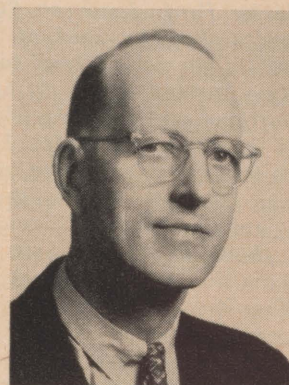
OCTOBER 15, 1960.

PLACE —

MACDONALD COLLEGE.

HONOUR YEARS — '55, '50, '45 and at five-year intervals.

Professor Cole was born in Bangor, Sask., where he received his elementary education. He taught school in Saskatchewan and spent six years in the Canadian Army, from 1940 — 1946. He is a graduate in Arts from the University of British Columbia and obtained his M.A. from that University in 1949. Before coming to Macdonald he taught English at Queen's University and at Sir George Williams' College. He specializes in Canadian literature.



PROFESSOR BANTING APPOINTED DIRECTOR OF DIPLOMA COURSE

Professor E. A. Banting has been appointed Director of the Diploma Course at Macdonald College. Professor Banting succeeds Professor L. H. Hamilton as Director.

Professor Banting obtained his B.S.A. from the University of Toronto in 1933 and graduated from the Ontario College of Education a year later. He taught high school for three years at Beamsville, Ontario, before becoming Director of the Agricultural Engineering Services of the Department of Agriculture and Marketing of Nova Scotia. In 1951 he was appointed Chairman of the Department of Agricultural Engineering at Macdonald College.

Professor Banting is well known throughout Eastern Canada for his work with soils and farm buildings, which are his primary interests.



CLIVE CAMERON JOINS MACDONALD EXTENSION

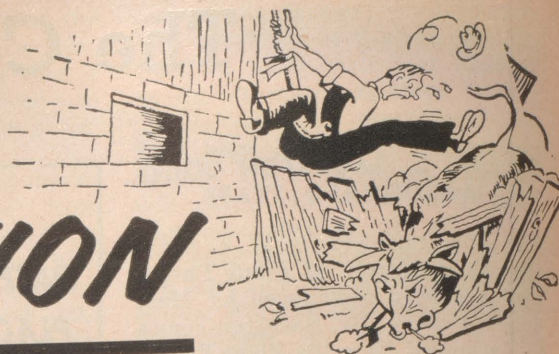
Mr. Clive P. Cameron has been appointed Assistant to the Director of the Extension Service at Macdonald College. Mr. Cameron was born in Toronto and graduated with a B.A. from the University of Toronto in 1953 and later attended the Ontario College of Education.

He has taught at the High School at Arthur, Ontario, at an Indian School north of Red Lake, Ontario, and for Frontier College. He also spent two years travelling in Northern Canada with mining organizations. Last winter he made a tour of colleges and schools in Great Britain, and also visited Folk High Schools in northern Europe.

POW!

Explosives and ammunition may cause death or serious injury if they are misused. These hazardous materials should be kept out of reach of children and unauthorized persons.

Letters for our BEEF SECTION



TREE FARMERS NEEDED

Dear Editor:

I was most pleased to read the article by Prof. Jones on "Growing and Collecting Seed of Evergreens". I do not pretend to be a full-time farmer but I do have a tract of land which my family uses in the summer and which I visit on the weekends for the enjoyment of some fresh air and quiet. This land, actually an old run-down farm, should never have been cleared. I am now in the process of replanting it to trees.

It seems to me that a lot of farmers are making very poor use of rough land. They should take more interest in reforestation and probably in woodlot management also. I think our government extension service should put more emphasis on this part of the farm operation.

There is also room for farmers themselves to organize for promotion of this part of their farm enterprise. In this connection I have heard rumours of a Tree Farmers' Organization. Can you supply information on this organization if it exists?

Yours truly,
L. J., Brome County

IT EXISTS

Dear L.J.

I am very pleased to answer your letter re the recently formed Canadian Tree Farmers' Association which has as its slogan "Valuable crops from woodlots". This non-profit organization was incorporated in May 1959 receiving a Federal charter, following which a Quebec Regional Branch was organized. Prior to this an organizing committee prepared By-laws for the Association. In summary they are as follows:

Purposes

- 1) To encourage and assist members to apply good forestry practices to the growing, harvesting and marketing of wood products and to encourage the

NOTE!

The Journal invites your questions, comments and opinions. Address letters to — Macdonald Farm Journal, Macdonald College, P.Q.

practice of fish and game management.

- 2) To obtain and make available to members accurate and extensive information on the growing, harvesting and marketing of wood products.
- 3) To stimulate advertising, experimentation and research by governments and by industry which will increase demand for wood products and develop efficient methods of production.
- 4) To strive for the establishment of systems of taxation which will permit and encourage the economical use of land for growing of wood crops.
- 5) To stimulate and encourage activities which will reduce waste by fire, insects, disease, grazing and destructive cutting in woodlots.
- 6) To encourage better land use in Canada on both private and Crown lands and the establishment of tree farms where they would contribute to better land use.
- 7) To encourage provincial governments to provide qualified representatives to assist in woodlot management.
- 8) To co-operate with other organizations having generally similar objectives and purposes.

Regional Branches

Regional Branches may be organized on a Provincial boundary basis.

Conditions of Membership

Any woodlot owner (a woodlot is defined as a tract of land of 3

LEAVING SCHOOL

Dear Mr. Editor:

Not only in the world of tomorrow, but in the world of today unskilled workers are finding it more and more difficult to compete with machines. It is easy to say that opportunity will exist for those whose education has fitted them for skilled positions, but look at what is happening. Today more young people without a special skill are leaving school than ever before.

Obviously more vocational and trade schools are necessary, along with a school guidance programme that will help young people who are not interested in going to University choose a vocational career before they break with school completely. Such a programme demands the co-operation of the whole community, but when we think of the demoralizing effect that unemployment can have on a young man or woman surely we would not withhold that co-operation.

S. M., Sherbrooke.

acres or more) may hold voting membership in the Association, dues \$5.00. Corporation membership dues are \$10.00. Associate membership includes anyone who does not own a woodlot, dues \$3.00. Associate members are not entitled to hold executive office in the Association.

Committees

The Association may have the following committees, namely membership; forest protection; legislation and taxation; silvicultural research; publicity; harvesting and marketing, and such other committees as shall be approved by the Board of Directors. Each committee shall submit a report to the President at the close of each fiscal year.

Members are entitled to a subscription to a monthly forestry publication containing Association

news which presently is "Forest and Outdoors — Rod and Gun", and a marketing report listing buyers of woodlot products in Quebec is soon to be published. All the present members have now received a Member's Manual containing publications on tree identification, maple sugaring, woodlot improvement and management, reforestation, Christmas tree growing, tree farming in Canada, and a report of the Special Committee of the Senate on Land Use in Canada. In connection with the above Member's Manual, the Canadian Tree Farmers' Association plans to urge the new Department of Forestry being formed in Ottawa to prepare a manual of woodlot management and to undertake special research studies connected with private forest land management.

At the recent annual meeting held in Lachute, the annual report was submitted and the following officers elected:

President — F. Howard Wilson,
18 Hazelwood Ave., Montreal 8,
P.Q.

Vice-President — I. René Paré,
Agronome, Lachute, P.Q.

Secretary-Treasurer — J. A. MacDonald, 33 Chippewa Ave., Ottawa, Ont.

At an earlier meeting the Quebec Regional Branch officers were elected and they are as follows:

Chairman — Stuart Armstrong,
R. R. No. 2, Lachute, P.Q.

Vice-Chairman — E. T. Asselin,
Choisy, P.Q.

Secretary-Treasurer — C. B. Kevin Clarke, 3455 Ontario Ave., Montreal 25, P.Q.

Undoubtedly there are many farm organizations. Some will say there are too many, all exacting their toll in the form of membership dues, time, etc. However, due to the great need for more readily available information and advice on the cultivation of the farm woodlot such an organization as the Canadian Tree Farmers' Association is a long-felt need and one in which the many owners of forest land of diverse interests can find common ground. It has been suggested that many Quebec Farm Radio Forum groups might wish to join the C.T.F.A. as corporation members and in this way keep in touch with developments in this association de-

signed to foster an interest and a keener appreciation of the value of the farm woodlot.

Membership should be forwarded to Mr. C. B. Kevin Clarke, 3455 Ontario Avenue, Montreal 25. For copies of the annual report and further information on the Association it is suggested that you contact Mr. Clarke.

Yours very truly,

A.R.C. Jones,
Director, C.T.F.A.

"WOULD YOU BELIEVE IT"

"The Canadian people have to a great extent let the field of consumer credit go by default to loan companies, largely under foreign control, who are permitted under present legislation to charge at rates up to 24% per annum on small loans, it is strange indeed that Canadians have allowed this thing to grow upon them.

The Superintendent of Insurance has issued his report for the year 1958 on small loan companies and money-lenders. (Available for 25 cents from the Queen's Printer, Ottawa). It shows that these middlemen in the business of small loans (under \$1500) continue to grow and make rich profit out of all proportion to their invested capital. In 1958 they counted up over \$9 million in profits after all expenses and taxes, other figures from their business that year — 1,107,500 loans made, totalling over \$477 millions, average loan \$431.00.

Well over 80% of this business of small loans in Canada is done by firms under foreign control. Two U.S.A. companies, the Superintendent of Insurance reports, made nearly 70% of small loans in Canada last year, these are Household Finance and Beneficial Finance.

The financial legerdmain of the small loans business is seen in the figures for Household Finance. With subscribed capital of only about \$3 millions in this country, it grossed well over \$9 millions in profits and still had a tidy \$5 millions in the kitty after taxes!

And so it goes. Their business continues to grow year after year. Canadian banks have largely failed to serve the field of consumer credit and credit unions have hardly had time to grow with the need, and the loan companies are cashing in on a good thing — at least good for them.

In the meantime efforts to draw a legal rein on the money-lenders are not meeting with success. Bills which would have limited the interest rate on small loans to 1% per month have failed to get government approval. Another bill to reveal true interest rates on small loans has been "talked out". At the same time the Senate is considering a Bill to incorporate another small loan company!"

To our way of thinking, this is indeed a sad portrayal of the present state of affairs in our country today and should dispel any complacency in us that we have done, or are doing a fine job. Obviously, from the above we have only just scratched the surface and that there is a crying need for vigorous education and promotion in our field. It is essential, therefore, that all of us in the Credit Union Movement today must do something about this. We have the power to do it so why not use this power by supporting our own Credit Union right up to the hilt by saving regularly and by encouraging as many of our friends as possible to do the same by joining our Credit Union. It is only in this way shall we have enough money in the kitty to serve the need of consumer credit for our own people and prevent these loan companies cashing in on a good thing — *with our money.*"

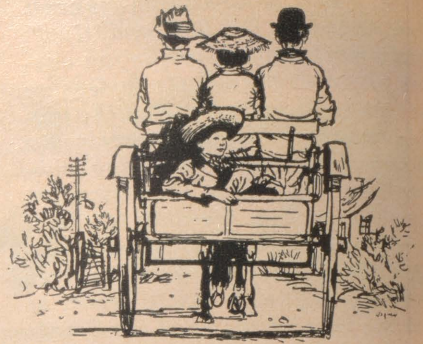
Alberta Credit Unions Bulletin

AVOID TROUBLE DRIVE ON RIGHT

If you wish to avoid a thousand and one headaches while driving, then always stay on the right hand side of the road. If you are driving at moderate speeds, driving on the right hand side of the road will allow the speeding motorist all the place in the world to pass on your left; if you are stopped at an intersection and if you are over to the right, then other cars can enter the same street. And if you wish to bypass another car, then immediately following return to the right hand side of the road. Too many drivers stay over on their left after passing another car.

The home is the scene of the majority of accidents that cause injury. Falls are a major cause. Four out of every ten fatal accidents to children between one to fourteen years, happen in the home.

The Country Lane



"The reason why so few people are agreeable in conversation is that each is thinking more of what he is intending to say than of what others are saying; and we never listen when we are planning to speak."

Roche foucauld

* * *

STANDARDIZATION

When, darkly brooding on this Modern Age,
The journalist with his marketable woes
Fills up once more the inevitable page
Of fatuous, flatulent, Sunday-paper prose;

Whenever the green aesthete starts to whoop
With horror at the house not made with hands
And when from vacuum cleaners and tinned soup
Another pure theosophist demands

Rebirth in other, less industrial stars,
Where huge towns thrust up in synthetic stone
And films and sleek miraculous motor-cars
And celluloid and rubber are unknown;

When, from his vegetable Sunday-school,
Emerges with the neatly maudlin phrase
Still one more Nature poet, to rant and drool
About the 'standardization of the race',

I see, stopping among her orchard trees,
The old, sound Earth, gathering her windfalls in,
Broad in the hams and stiffening at the knees,
Pause, and I see her grave, malicious grin.

For there is no manufacturer competes
With her in the mass production of shapes and things.
Over and over she gathers and repeats
The cast of a face, a million butterfly wings.

She does not tire of the pattern of a rose,
Her oldest tricks still catch us by surprise,
She cannot recall how long ago she chose
The streamline hulls of fish, the snail's long eyes.

Love still pours into its ancient mould
The lashing seed that grows to a man again,
From whom by the same processes unfold
Unending generations of living men.

She has standardized his ultimate needs and pains;
Lost tribes in a lost language mutter in
His dreams; his science is tethered to their brains;
His guilt merely repeats Original Sin;

And beauty standing motionless before
Her mirror sees behind her, mile on mile,
A long queue in an unknown corridor,
Anonymous faces plastered with her smile.

— A. D. Hope

SUMMER WHEATFIELD IN QUEBEC

Small echo of a Western plain,
Epitome of gold expanse,
The field stands bright 'neath gentle rain
And in the sunshine seems to dance.

The reaper toils to cut and stack;
The spectacle with joy resounds.
Admire by day, and then come back
At eve to view the shadowy mounds.

See, like long-skirted tiny dames, —
Their stance, affectionate embrace,
Or gossip group, or secret games;
The pleasing outline thus we trace.

The total picture's lovely, too,
The tousled heads a clear contrast
With border green, a sombre hue,
Made gayer while the flowers last.

Olive Sanborn Rubens

* * *

"The world is now too dangerous for anything but
the truth, too small for anything but brotherhood."

A. Powell Davies

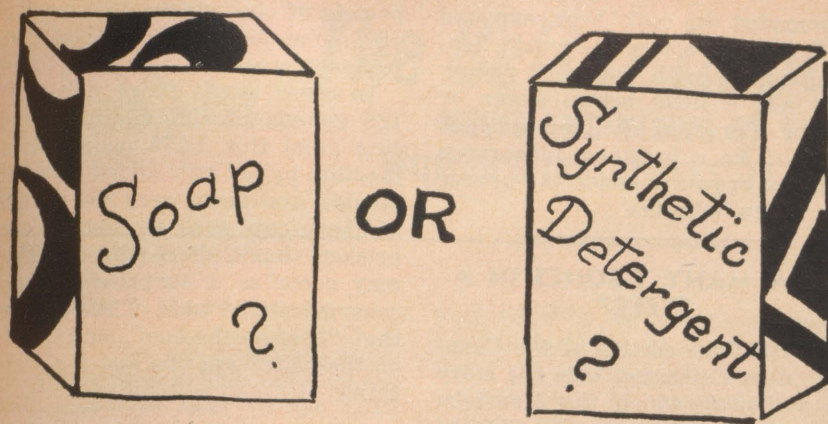
* * *

DISCRETION

"There are many shining qualities in the mind of man; but none so useful as discretion. It is this which gives a value to all the rest, and sets them at work in their proper places, and turns them to the advantage of their possessor. Without it, learning is pedantry; wit, impertinence; virtue itself looks like weakness; and the best parts only qualify a man to be more sprightly in errors and active to his own prejudice. Though a man has all other perfections and wants discretion, he will be of no great consequence in the world; but if he has this single talent in perfection and but a common share of others, he may do what he pleases with his station in life."

Addison

Macdonald Farm Journal
welcomes contributions of original verse.



Soap or synthetic detergent? How do you know what you're buying? For the whitest, brightest wash, it's important that you know. If the manufacturer doesn't tell you on the package, Miss Jenkins suggests you try these simple tests.

The packages stand in orderly rows on the supermarket shelves. Their colours are fresh and gay. Their labels lilt of cleanliness: Azure Dawn, West Wind, White Cloud. The virtues of the product are extolled, directions for easy use are outlined, the premiums inside are illustrated. The whole design coaxes the shopper to buy. But nowhere, not in the finest of the print, is any hint given of the type of cleanser inside. It may be a soap, it may be a synthetic detergent. Surely the consumer has the right to know what she is purchasing!

A detergent, by definition, is any agent which aids in the removal of soil. Soap, then, is a detergent. It is manufactured by the boiling of fats and oils with an alkali, usually sodium hydroxide or lye — basically the process our grandmothers used. The *synthetic* detergents were developed by research in the laboratories of the scientist. They are built up, step by step, in a series of chemical reactions and they are endowed with many qualities that differ from those of soap. For example, they are readily soluble in cold water, they do not react with the mineral salts in hard water, they are not affected by mild acid solution. Soap, on the other hand, dissolves very slowly in cold water. In hard water or in mild acid solution it breaks down to form greasy sticky soil-retaining films. On the credit side, however, it has the reputation of doing the best laundry cleansing, given soft or properly softened water in which to work.

by Professor JENKINS

School of Household
Science

Several simple tests can be made in the home to distinguish between these two, tests which will enable the homemaker to put the anonymous product in the box to the work which it can perform most efficiently.

The hard water test can be made only in areas where mineral salts have been dissolved out of the soil or the rocks. This experiment also demonstrates nicely the problem of soap used in hard water. Fill a clean quart-sized bottle half-full of *warm* tap water. Add about an eighth of a teaspoon of the detergent to be tested. Cork lightly and shake for half a minute. Soap reacts with the mineral salts, softens the water but clouds it with greasy mineral salt-soap particles. None is left to form the familiar suds nor to cleanse. Synthetic detergents (with one exception — the non-foaming type) will froth almost immediately.

The solubility test is a repetition of the first, but the clean bottle is half-filled with *cold* tap water and quarter of a teaspoon of the detergent is added. The synthetics dissolve quickly, soaps do not.

The acid test is the most specific. Pour warm tap water into the clean bottle, then two tablespoons of vinegar (acetic acid). Add half a teaspoon of detergent and shake. The foaming-type detergents will suds. The non-foaming type will dissolve into a clear solution. The soap will break down to a greasy film which turns the water milky or rises to the top in a curdy white mass.

MILK IS A FOOD BARGAIN

ACCORDING to nutritionists, and economists the bottle or bottles of milk delivered to the doorstep of the consumer, represents the best food bargain available today. Nutritionists in the U.S. claim that if you were to duplicate the food elements in a quart of milk, by purchasing them in other food products it would cost you about 43 cents, about 60% more than these same elements cost you in a quart of milk. The late Dr. Charles H. Mayo the distinguished surgeon at the famous Mayo Clinic said: "Considering its cost per pound, milk offers more food for the money than any other food material available."

Studies of consumer food expenditures in the U.S. show that between 18 and 20% of the family food budget is spent for milk and milk products. Members of American families get from 23-26% of their calories, 40-45% of their protein, 75-84% of their calcium, 59-76% of their riboflavin, 35-39% of their vitamin A. 18-19% of their thiamin, and 5-6% of their iron and niacin from this food expenditure.

At the same time the U.S. Bureau of Labour Statistics states that in terms of today's factory wages, the "real" price of a quart of milk is the lowest in history. Back in 1890 it took 26 minutes of factory work to pay for a quart of milk which sold at an average price of 6.8 cents. Today it takes less than 7 minutes of work to earn the price of a quart of home-delivered milk, figured at 25.2c per quart.

These are U.S. figures but Canadian statistics are quite close to these, and in each case they indicate that the consumer gets a real "good buy" in milk or milk products.

C.F.A. Bulletin

AVOID CONFUSION

There is often some confusion in the titles of three branches of workers in the field of human sight. The oculist or ophthalmologist is a qualified eye doctor whose practice includes medical and surgical eye treatment, as well as prescription of glasses. The optometrist is licensed to test vision and prescribe glasses, and treat optical defects without drugs or surgery. The optician is a skilled technician who grinds lenses to prescription but does not treat or test vision unless he is also a qualified optometrist.

SQUASH IS HERE AGAIN

IN late summer and early fall, the arrival of each new month brings with it a new selection of vegetables on the market. With the coming of September, early varieties of squash are here again. The yellow and green of the Acorn or Pepper squash can be seen everywhere.

The mild flavour of this squash combines well with many foods such as onions, tomatoes, seasoned butter, cream, lemon juice, sour cream and bacon. It is also delicious served with any kind of meat. The Consumer Section of the Canada Department of Agriculture has tested different ways of cooking squash and they are all delicious. For variety, why not try them all!

Squash can be baked in the oven as you would potatoes. Wash it and place whole on a rack in a hot oven (400°F) and bake until tender. Baking time varies according to the size of the squash. A large squash would require approximately 1 hour to bake. Remove from the oven and allow to cool 2 or 3 minutes before cutting it open. Cut the squash in half lengthwise and remove the seeds and coarse fibres. Split the pulp and fill the opening with a piece of butter or a spoonful of sour cream. Season and serve as an accompaniment to your favourite meat.

Steaming squash is quicker than baking it, so if you are in a hurry proceed as follows: Wash the squash and cut it in half lengthwise. Remove the seeds and coarse fibres. Pour water into a steamer and arrange the squash halves cut side up on a rack. Cover closely and place over high heat until the steam escapes. Then reduce the heat and steam for approximately 25 minutes. Remove squash halves from the steamer, then turn them cut side down on a rack to drain for a minute or two.

In a still greater hurry? Then boil the squash. Peel it, cut it open and remove the seeds and coarse fibres. Cut the squash in 1-inch cubes and cook in a small amount of boiling salted water until tender. Serve with butter and finely chopped onion or with cream. If you wish, you may mash the squash as you would potatoes.

You can also use your pressure saucepan to cook squash. Cut the squash in half and remove the seeds. Place on rack in cooker and add water. Cook for the time rec-

ommended in cook book supplied with your pressure saucepan. Season squash with salt and pepper and add a little brown sugar or butter. Serve in shell or mashed. If you like a browned appearance you can brown it under the broiler for a few minutes.

HOW MANY T-BONES IN A STEER?

THE June edition of the Canadian Cattlemen tells the story of a display which the Manitoba Stock Growers set up at the Winter Fair to show the disposition of a carcass of beef. Using a 1,175 pound steer as a basis, the Growers demonstrated that 1,021 pounds of this carcass were saleable in some form — 689 pounds of this being the dressed carcass, and 332 pounds being by-products. The dressing percentage was 58.6% and the carcass graded Choice.

From the 689 pound carcass a total of 170 pounds of bone, fat and shrink had to be deducted leaving 519 pounds of saleable retail cuts. Over the counter from this steer there was available — 33 pounds of prime rib roast; 26½ pounds of sirloin tip roast; 25½ pounds of sirloin steak, 18½

pounds of club steak; 16½ pounds of T-bone steak; 3 pounds of Porterhouse steak.

In other words there were only 123 pounds of choice, high-priced cuts from this 1,175 pound steer. Medium priced cuts added up to 92 pounds, and there were 304 pounds of cheap cuts such as chuck, plate, brisket, shank, short-ribs, etc. This may come as a surprise to some consumers who were of the opinion that "beef-on-the-hoof" and "beef-on-the-plate" are one and the same thing.

CFA Bulletin

TRAVEL NOTES

BIRD thinks travel thoughts. He joins a gathering around a benevolent sunflower and, without aid of road maps, discusses routes toward the Gulf States. A bird has no intention of staying North to vote. Whatever blue jay may be chosen to run for bird-sheriff this year, he will have to get elected without the help of a restless sparrow. Sparrows will not even bother to take out absentee ballots. They plan to be as far South as Georgia when the votes are counted.



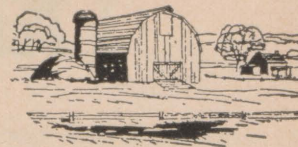
WHOSE JAM WILL TAKE THE RIBBON?

Left to right: Miss Kathleen Reid, Mrs. Roland Greenbank, Judge, and Mrs. Jamieson, a Director of the Huntingdon Fair, as they endeavour to select the best.



The Better Impulse

NEWS AND VIEWS OF THE WOMEN'S INSTITUTES OF QUEBEC



OFFICE HAPPENINGS

NOTE: To all members, especially treasurers. The only money that should be sent to the QWI office is money for stationery, cookbooks, or pictures for the Tweedsmuir Histories. ACWW Scholarship Fund, Hoodless Homestead Fund, etc., all go to the Provincial Treasurer, Mrs. V. R. Beat- tie, Richmond, Que.

Mrs. Ellard represented the QWI at Miss Abbie Pritchard's funeral. It pleased the family very much for her to be so remembered by the QWI. The sunshine basket sent to her by the QWI arrived at the hospital while she was still able to enjoy the gifts. They were mostly articles a hospital patient could use.

OUTLINE: EDUCATION

by Mary Rember,

Q.W.I. Convener of Education

WITH the new term just commencing let it be an educational one for us all, with a better understanding or knowledge of the things pertaining to the work of our organization. Former conveners will be familiar with most of the work usually done; to the new conveners may I suggest the best reference to acquaint yourselves with the work of this convenor-

ship would be the reading of education reports in the Annual Reports of previous years.

Each year the students in the various schools look forward with keen anticipation to help which W. I. members give by donating prizes of money or books, scholarships, bursaries or loans. Institutes also assist with library work and cafeteria service and encourage public speaking contests. Adults should participate in Home and School Associations, study clubs, bookmobile services and community courses.

"Adult Education is a 'must'." This has been stated not only at our own Conventions but in many places. Nothing is truer! This applies to us all as we strive to learn better and newer ways to educate and to be educated ourselves in order to better world conditions.

This is a Tweedsmuir Contest year! We are hoping that every effort will be put forward to complete Tweedsmuir Village Histories.

Our National Conveners are also stressing Art and Literature as worthy pursuits in the Cultural Activities program which comes under our educational program. Anyone with the recent Federated News would find helpful outlines by Mrs. Partington, F.W.I.C. Convener, to be of wonderful assistance; also articles by Mrs. Ramsay and Mrs. John McLean. Your own scrapbooks, pictures of many of Canadian artists' work, your own selection of pressed flowers, etc. (referred to in 1959 Annual) are still recommended for 1960 work in Art. Certain school classes might like to try this idea, too.

All were impressed with the duets at Convention and those should be an inspiration to other groups to try to keep up interest in music in which there does not seem to be the amount of interest as in some of our other work. Drama and good reading should not be overlooked. The "Harwood Singers" and "Facts, Fingers and Fun" courses are good examples to the rest of us.

The work for Retarded but

Trainable Children still continues to be most deserving of our attention. Generally speaking, there seems to be a keener interest but little can be accomplished unless we can provide more trained personnel and places for the children's care. We should continue our efforts in this direction.

Concerning safe-driver education and bicycle training, I do hope that these safety practices will be continued this coming year. The rules of the road for motorists and bicyclists should be a good place to start and I hope every branch or county will see that the rules are learned. Copies of these rules will be available either from the office or in Macdonald Farm Journal.

All former projects in this department are to be continued. These are listed below for your reference.

Topics for Education Conveners

1. School and Adult Education.
2. Handicapped, Retarded but Trainable Children.
3. Historical Research (Village Histories).
4. Music, Drama, Art, Good Reading.
5. Safety education (High School or Adult Classes) bicycle, etc.
6. Bilingualism or other community courses.

BROADCAST TIMETABLE

To hear the QWI broadcasts listen to the following stations:

CJOC, Quebec, 2nd Monday in the month at 7.15-7.30 p.m.

CKTS Sherbrooke, 3rd Thursday in the month at 1.15-1.30 p.m.

CKNB Campbellton, N.B., 1st Thursday in the month 9.50 p.m. (Standard).

WIKE, Newport, Vt., 1st Wednesday in the month at 1.35 p.m.



Miss J. McQuat and some of the hats made by Eardley WI.

An Indian Convention

by Norma HOLMES, Prov. Sec.



Some of the Indian delegates at the Indian Homemakers' Clubs Convention, Maniwaki, Que.

YOUR secretary is just back from attending the Indian Homemakers' Clubs Convention held on the Maniwaki Indian Reservation, Aug. 16-19.

There were five clubs representing Caughnawaga, Restigouche, Maniwaki, Village Huron and Odanak. Some claimed they were English speaking and some French, but the English speaking were bilingual and the majority of the French speaking also.

They have a fine hall at Maniwaki, with a large dining hall and completely equipped kitchen downstairs and the Maniwaki members managed everything beautifully. Along one side of the hall were exhibits of handicrafts from the different Clubs. These were later judged and prizes given, also plaques were presented to Clubs with 10 or 20 year old organizations. Each reservation has its own specialty. One was good at making mocassins, others beadwork and birch bark articles, etc. They also had sewing, including many things made of used materials, or 'left-overs', such as slippers of ends of the blankets after making Hudson Bay coats, and shirts and small dresses from the Mounties scarlet jackets.

Officials of the Department of Indian Affairs attended some sessions, especially the banquet Thursday noon (when one item on the

menu was Mindaminabeau, a soup of hulled corn, shell beans and wild rice). Acting Chief Tenasco, a young man, was the speaker, and considering he had, as he said, only a Second Grade education, he certainly made his points clear — especially concerning Indian rights and grievances. He thought the money set aside for them was not enough, that all the resources being exploited were originally theirs. At the same time, he acknowledged that without the money spent by the white man developing these resources, the Indians could not by themselves have made Canada the country it is today.

Thursday afternoon we toured the reserve, ending with a picnic at a small lake. The Maniwaki Reserve is about 10 miles square and is, I was told, one of the more 'sophisticated'. Most of the houses I saw now have electricity and running water. The houses are small, but mostly painted and very neat with house plants and flowers.

I enjoyed more than anything just talking to them and learned a great deal and got some surprises — one being that they do not want the vote and won't use it — at least until they are more sure of what it will mean for them. There seems to be a feeling of insecurity regarding their future status, which is very under-

standable considering an unfortunate history of government 'broken faith' dealings with them in the past. As one of the officials of the Department of Indian Affairs said, "We are trying very hard to restore their confidence in us, but it is a long, slow process".

The meetings were informal and the women very friendly and gay — especially two who were the 'life of the party', breaking into an Indian or other dance at the least excuse. Their reports showed that they do a lot of welfare work. The families are very much mixed up, some members living on the reservation and others outside. One woman told me that only one of her 13 children was still on the reserve. Nevertheless, many said they never wanted to leave the reservation. Again it seemed to be that feeling of insecurity, although the leaders emphasized that they must and should learn to do more for themselves if they expected help from the Department.

There is a new spirit of independence showing in the younger women. They feel that they have had too much 'direction' in the past and that, in their club work at least, they consider they are now quite capable of running their own affairs and intend to do so. It is certain that in a few years there will be a big difference in the breadth of outlook of at least the members of the Indian Homemakers Clubs.

(Continued on page 22)



Delegates in native dress representing three reservations. From left to right: Mrs. Louise McComber, Caughnawaga; Mrs. A. Gros-Louis, Village Huron; Mrs. Gros-Louis, Village Huron; Mrs. V. Nolet, Odanak.

The Month With The W.I.

I do hope that you enjoy our series commencing this month, on the Q.W.I. Executive Conveners. They work very hard for the Women's Institute, and are worthy of your recognition.

At the request of the Federated W.I. of Canada I am attempting to assemble a set of 35 mm slides depicting beauty spots, places of historical interest, and if possible W.I. members at work in Quebec. If anyone has information as to where these could be obtained, please write to me.

ARGENTEUIL:

ARUNDEL heard about a trip to Grenada and Brazil. BROWNSBURG enjoyed a Home Decorating course with Dalesville W.I. and FRONTIER made hats from kitchen utensils. JERUSALEM-BETHANY heard about the work of the CNIB, from guest speaker Mr. McClintock. LAKEFIELD received Fair prize money and PIONEER'S Publicity convener read an article on Miss J. King, as published in the Gazette. Mrs. C. Hughes of Thurso was the lucky winner of a quilt drawing. UPPER LACHUTE EAST END held a "Grandmothers night" and Old Time Fashion Show. Members will use their talents to raise a dollar each for the funds.

BONAVENTURE:

GRAND CASCAPEDIA received a donation from the Cercle des Fermieres, toward the purchase of a Science Kit for St. Jules Convent. PORT DANIEL report that their Publicity convener Mrs. John Journeau commenced a series of monthly radio broadcasts with a paper on "The Growth of the Q.W.I."

BROME:

AUSTIN held a work meeting to prepare for their annual garden party. KNOWLTON'S LANDING are likewise preparing for a food sale and Tea, and South Bolton held a picnic.

CHAT-HUNTINGDON:

AUBREY-RIVERFIELD describe their meeting as "Patriotic." DEWITTVILLE report two new members and prizes given for impromptu speeches. Swimming instruction is given to school children 3 days a week. DUNDEE heard a high school student report on a class trip to New York City. A discussion was held on rural conditions affecting our youth. HOWICK entertained 50 senior citizens at a picnic with the programme provided by the conveners. HUNTINGDON also enjoyed a picnic, and then viewed handwork consisting of ceramics, paintings, sculpture, and hooked and braided rugs. ORMSTOWN had a demonstration on the care of hands and what they portray; this was a picnic meeting too.

GASPE

HALDIMAND entertained a former member now living in the West, and presented a blanket to a member's new baby. SANDY BEACH made hats from kitchen utensils.

GATINEAU:

AYLMER EAST had a visitor from England, Mrs. Throughgood, who told of the many courses enjoyed

by members in her country and showed examples of their work. Mrs. B. McLean read a paper on "Gas Chambers for Porkers", and Mrs. E. Craig told of Col. Baker's work with the blind. Mrs. B. McLean also reminisced with a talk on "The good old days on the farm". EARDLEY had a beauty demonstration given by Mrs. Frank Cornu and a paper on "Education begins in the home" read by Mrs. J. Robinson. KAZABAZUA entertained the "Grandmothers" at their meeting, and RUPERT report that the annual memorial service was well attended. A utility building at the cemetery has been provided by the W.I. and cupboards built in the W.I. Hall. WRIGHT had a demonstration of beauty products and gave towels to the Brookdale Children's Home.

MISSISQUOI:

COWANSVILLE enjoyed a talk by Mrs. Rubens on her recent tour of England and India, and in association with the Cowansville Art Centre. A talk on flower arrangement was given by Mrs. Cushing. A departing member (and last years County Publicity convener) Mrs. J. Robertson was presented with a gift with best wishes for happiness in her new home in N. Carolina. DUNHAM held a picnic at Selby Lake (husbands and children came too.)

PAPINEAU:

LOCHABER sent a donation to a Korean Orphanage, through CARE. The roll call was answered by bringing some handicraft work done during the year, and a wonderful display was arranged. This is the time of year for visitors, and Winnipeg, Montreal, Toronto, and Winchester were represented at this meeting.

PONTIAC:

BEECH GROVE were pleased to have Mrs. George Fraser present at their meeting. Mrs. Fraser is the oldest living member of Pontiac County W.I. and she gave many happy recollections of past meetings. ELM-SIDE send flowers to a lady on her 95th birthday and were musically entertained by a visitor. QUYON enjoyed two contests prepared by their vice-presidents, and STARK'S CORNERS held a picnic. WYMAN honored the "Grandmothers" by giving a prize to the oldest and the youngest in attendance.

QUEBEC:

VALCARTIER had a quiz on "Citizenship", and two readings by their Citizenship convener, Mrs. W. Jack: "In the good old days" and "Husbands Lament".

RICHMOND:

DENNISON'S MILLS had an article on "Giveaway Stamps" read by Mrs. E. Carson and the majority were not in favour of these. Two subscriptions to the Federated News were taken and a cup cake contest held. GORE heard about the care of elderly people from Mrs. M. Armstrong, Matron of the Wales Home, and RICHMOND YOUNG WOMEN catered to a wedding. MELBOURNE RIDGE had a busy time serving food at Richmond Fair and met many W.I. friends. RICHMOND HILL have painted the exterior of their hall and a contest for an article made from

a flour bag was won by Mrs. McIver. SPOONER POND had a demonstration on tile work by a delegate to the Leadership course. SHIPTON served refreshments in the Antique display room during the Danville Centenary Celebrations. A donation was made to the SPCA for use in prevention of cruelty to animals in wayside zoos.

ROUVILLE:

Report a good time enjoyed at a mixed card party and donated more dishtowels to the school lunch room.

SHEFFORD:

GRANBY HILL had a contest on how many things you can put in a jar starting with the letter "B". GRANBY WEST discussed beauty spots in Canada which have been visited by the members.

SHERBROOKE:

ASCOT entertained guests, including Mrs. W. J. Marlin who displayed an autograph quilt, made over 25 years ago by this Branch and won by her at that time. A moment of silence was observed for a departed member, Mrs. J. Copping. BELVIDERE attended "Open House" at the school for retarded children. BROMPTON ROAD worked at the Cancer dressing station, and heard a paper on the "Relationship of Man and Nature." LENNOXVILLE also visited the school for retarded children, and held a food sale. A meeting was held at the Grace Christian Home at Huntingville where tea was served and gift presented to senior citizens. MILBY report a successful supper and a talk on a trip around the Gaspé Peninsula.

Q.W.I. PROFILE

MRS. H. M. Ellard, President of the Women's Institutes, was born in England. She received her early education in that country, coming to Canada with her parents in her late teens. Mrs. Ellard is a graduate of the Lady Stanley Institute Training School for Nurses, Ottawa, receiving her R.N.

In 1917 she married Herbert Ellard, lumberman and farmer from Pickanock, and a member of a pioneer family that did much to open up that region of Gatineau County. The Ellards, who have no children, retired to Ottawa about ten years ago. Mr. Ellard passed away a short time ago.

After her marriage Mrs. Ellard lived in Wright, Gatineau County, where she was unofficial district nurse. She formed the Wright Women's Institute in 1940 and became its first president. She also served as County President, and during World War II directed the QWI War Services effort, heading the Special Committee set up for that purpose. Later she became Convenor of Welfare and Health for the QWI. At the end of her second term in that position she was elected 2nd Vice-President for the QWI, going on to 1st Vice-President, and was elected President at the Provincial Convention, 1960.

Mrs. Ellard has represented the QWI for two terms on the National Board of Federated Women's Institutes of Canada 1953-55, and was again appointed to that position at this year's QWI Convention. Mrs. Ellard was Chairman of the National Office Committee, formed by Federated Women's Institutes of Canada to arrange for the setting up of the national headquar-



ters, and has represented both the QWI and FWIC at many important meetings of affiliated or associated organizations.

At the present time Mrs. Ellard represents both her own province and FWIC on the Canadian Broadcasting League. In the summer of 1959 Mrs. Ellard led the Quebec delegation to the Ninth Triennial Conference of the Associated Country Women of the World, in Edinburgh.

MISS ABBIE PRITCHARD PASSES

Miss Abbie Stewart Pritchard passed away at the Shawville Hospital early in the morning of August 10th. Abbie had been in hospital some weeks, after having suffered several strokes. She and a sister-in-law, Mrs. Frederick Pritchard, had made their home together at Wyman, Que.

Miss Pritchard's interests centered around her Church and the Women's Institutes. She held many offices in her local Branch and

County and was for about twenty years Provincial Treasurer of the Quebec Women's Institutes.

She was a most friendly and kindly person and was always greatly concerned with the successes of others as well as with their sorrows. Many of the older W.I. members will remember Miss Pritchard in her work with the W.I. She was a living example of the W.I. Creed and Motto, "For Home and Country".

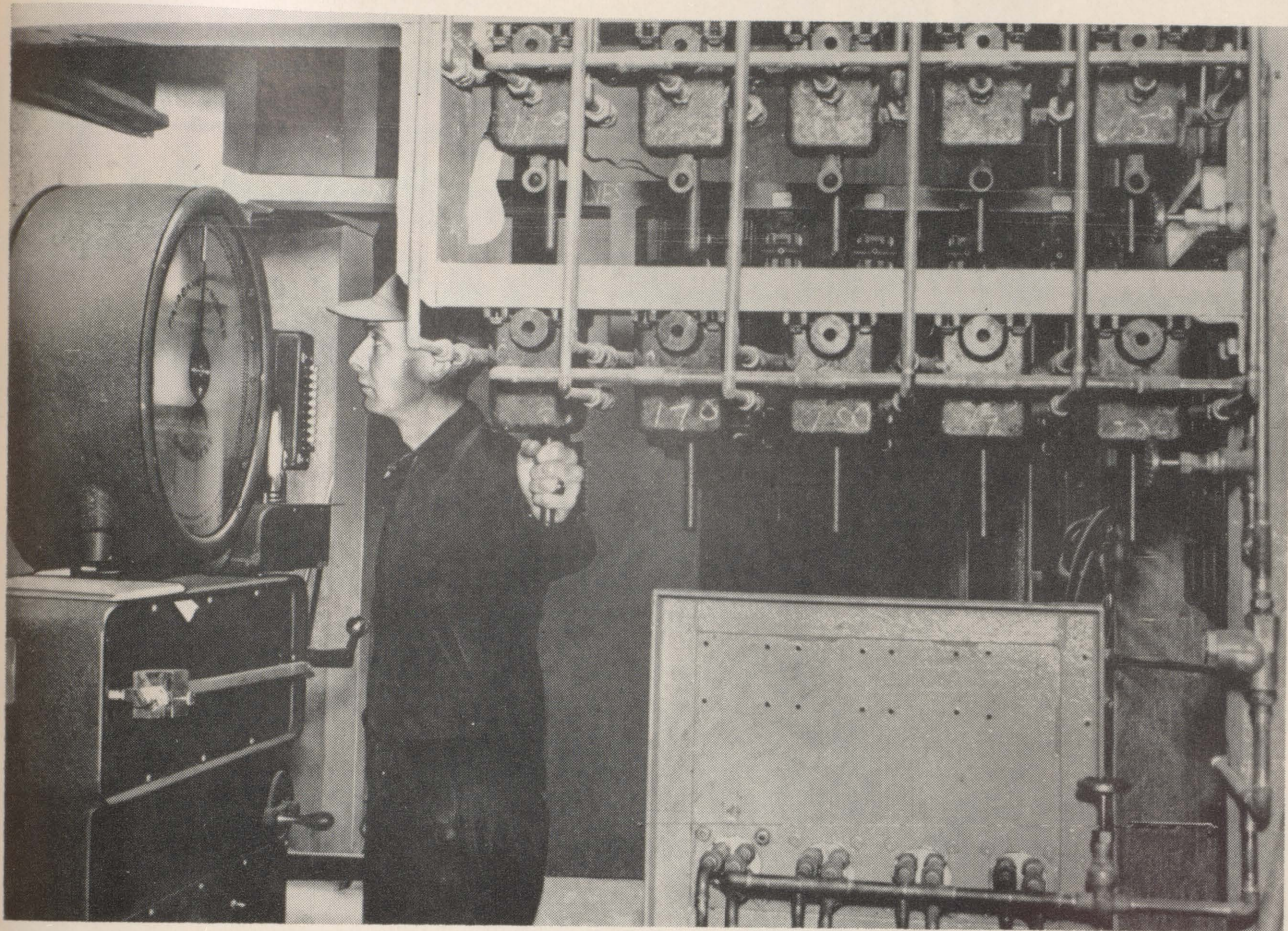
The funeral service was held at her home at 2.00 p.m. on August 12th and the burial took place in the cemetery at Norway Bay. The Quebec Women's Institutes was represented at the funeral by the President, Mrs. H. Ellard, and a floral arrangement of gold and blue flowers, the W.I. colours, was sent by the Quebec Women's Institutes.

(Continued from page 20)

They were very interested hearing about our Institute work. One thing especially several mentioned. They would like some guidance in budgeting and household management, particularly in the districts where the men have only seasonal employment. Two young women from Restigouche were among those requesting help and as Jocelyn King is down there now, I gave them a note for her and hope that she may be able to squeeze in a talk to them.

It was altogether a wonderful experience. I have a large picture of the whole group, but it is too large for the Journal. The others I took myself.

A daily dose of vitamin D is necessary to children from birth right through their growing years, in order to develop strong bones and teeth and to prevent rickets.



Applied Science . . . in the Checkerboard Bag

Unless you are over 65 years old, the Ralston Purina Company has been manufacturing Chows, and watching feeding results, since before you were born.

That length and breadth of experience and observation ought to teach anyone a good deal about feeds and feeding; but Purina does not rely upon experience and observation alone. It maintains a staff of nutrition specialists whose full-time business it is to study research results the world around and to test anything which looks significant.

It provides these specialists with well equipped Laboratories, and with a chain of Research Farms for practical, large-

scale feeding tests under all kinds of climatic conditions. The class of animal or poultry concerned provides the final answers to the scientists' questions.

Before any Purina Chow reaches the milling stage, it has been thoroughly tested and proved. The actual ingredients used must also measure up to Purina's exacting standards; and, finally, the accuracy of milling and mixing is constantly checked by Purina's Micro-Mixing Laboratory.

When you follow a Purina Programme, you turn Applied Science to your service.

RALSTON PURINA COMPANY, LIMITED
WOODSTOCK, TORONTO, WHITBY, MONTREAL, SAINT JOHN.





THE MACDONALD LASSIE